

Sunday December 14, 2014

Chairman Mary Nichols and ARB Staff  
Air Resources Board, California Environmental Protection Agency  
1001 I Street  
Sacramento, CA 95812

RE: Amendments to the California Cap on Greenhouse Gas Emissions and Market-Based Compliance Mechanisms

Dear Chairman Nichols:

Finite Carbon is an active participant in the California compliance offset market. We are currently developing 15 improved forest management projects projected to deliver over 10 million offsets by 2020 – more than 5 percent of the anticipated offset supply needed by the program.

We have enclosed several comments which we hope the Air Resources Board will take into consideration as it seeks to improve the forest carbon offset protocol and establish new forest management policy in California and the rest of the United States.

We thank you for your consideration and would be happy to answer any questions you may have.

Sincerely,

A handwritten signature in blue ink, appearing to read "Sean Carney", with a stylized flourish at the end.

Sean Carney  
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## Comments on the Compliance Offset Protocol – U.S. Forest Projects

### 1.2 Definitions.

Page 6 Definition 36 - “Open Canopy Harvest Unit” The definition of open canopy harvest unit as “a harvest unit with an area of 3 acres or greater that has less than 50 square feet of basal area retention” does not provide adequate protection for forest health and environmental concerns. Furthermore, it is not an appropriate standard for forest management in the eastern portion of the United States.

In order for ARB to achieve the board mandate to address the environmental and visual impacts of clear cutting and encourage forest management that results in healthy forests, we suggest an alternative definition of Open Canopy Harvest that is modified using a definition used by an eastern state:

**“Open Canopy Harvest Unit - any area 3 acres or greater where cutting over a 10-year period of time results in the total basal area for trees at least 1 inch dbh being less than 30 square feet per acre. However, it is not deemed an open canopy harvest if the total basal area of trees at least 1 inch dbh is at least 30 square feet per acre AND the total basal area for trees in excess of 6 inches dbh is at least 10 square feet per acre. Open canopy harvests of 3 acres or more will be aggregated in computing the 40 acre threshold if they are not separated from each other by uncut areas at least twice the size of the open canopy harvest unit or 300 feet wide at all points, whichever is less.**

### 3.6. Offset Project Commencement

Finite Carbon has previously received written guidance from ARB that the commencement of a carbon inventory may serve as an event that would denote Offset Project Commencement for Improved Forest Management projects. For consistency, we ask that this action should be added to the updated protocol.

### 5.1.1(d)(1); 5.2.1(h)(1); 5.2.2(e)(1); and 5.3.1(d)(1)

These sections contain the same language:

*(1) If correctable errors to the baseline are detected in subsequent verifications, the baseline must be adjusted prior to a verification statement being issued. The corrected baseline would then supersede the originally verified baseline for the purpose of determining GHG emission reductions and GHG removal enhancements going forward.*

*(A) Previously issued ARB offset credits will be subject to the invalidation provisions in section 95985 of the Regulation.*

*(B) In no case will additional ARB offset credit be issued*

We agree that this language clarifies that mistakes in the baseline which over-credit a project are subject to the invalidation procedures of the Regulation. However, we believe that if a mistake is found in the baseline which results in additional offset credits, that those offset credits should be rightfully issued to the landowner.

We see no reason that the liability for a mistake made in a baseline calculation that goes unnoticed by a developer, landowner, verifier, registry, and ARB continues to exist for up to 8 years following issuance of offset credits, while a potential significant loss to the landowner and available supply that goes unnoticed by a developer, landowner, verifier, registry, and ARB should be lost forever. We believe there should be congruity in the treatment of calculation errors discovered after initial issuance.

**Therefore, we propose that sections 5.1.1(d)(1)(B), 5.2.1(h)(1)(B), 5.2.2(a)(1)(B), and 5.3.1(d)(1)(B) be deleted from the protocol.**

#### **Carbon Stocks – Private Land – Equation 5.5**

ARB has proposed a requirement to calculate weighted average above-ground standing live tree carbon in the logical management unit of the proposed project if Initial Carbon Stocks are above Common Practice.

This requirement is a barrier to large landowners placing portions of their property into a carbon project in order to protect old-growth and other well-stocked stands. It was not included in the original version of the protocol and will have a negative impact on utilizing carbon as a conservation tool for subsections of a large property.

These conservation-minded projects require landowners to maintain the beginning carbon stocks of stands which are above common practice which are the most at-risk for harvest due to their commercial value.

Implementing a project on lands where the determination of a Logical Management Unit is required is a high-risk proposition for a landowner because the definition of LMU leaves significant discretion to verifiers and the Air Resource Board in practice. Therefore, landowners must expend significant capital in order for a few individuals to ultimately make an interpretive decision of the appropriateness of the proposed LMU.

Carbon can make a significant difference in the way small ecologically sensitive areas of land within a larger holding are managed. As an example: Carbon rarely competes with the value of timber; however, in riparian areas where logging is more expensive, creating value through the growth of stands allows carbon to be a viable revenue source and will increase the length of rotation for these areas, thereby reducing erosion and negative impacts on water quality and aquatic habitat.

**Finite Carbon recommends that Equation 5.5 not be modified. Project scenarios where this proposed modification will be an obstacle include: protecting view sheds; old growth stands or stands with legacy old growth; well-stocked stands; riparian areas; endangered species habitat**

such as spotted owl, marbled murrelet, and fishers; areas with unique soil composition and plant habitat; and culturally sensitive areas.

### 3.1. General Eligibility Requirements Page 18 (a)(4)(A) and (a)(4)(B)

**ARB has proposed language which requires extraordinary buffers around open canopy harvests:**

(4) If harvesting occurs within the project area, meet the following harvest unit size and buffer area requirements:

- (A) Harvest units that have less than 50 square feet of basal area retention must not exceed 40 acres in total area;*
- (B) Open canopy harvest units, harvest units with an area of 3 acres or greater that have less than 50 square feet of basal area retention, must have a buffer area of forest vegetation containing at least 50 square feet of basal area retention must surround the harvest unit. The width of the buffer area must be a minimum of the area of the harvest unit, rounded up to the nearest acre, multiplied by 40; and*
- (C) Cuts on harvest units that occurred prior to the project commencement date are exempt from subchapters 3.1(a)(4)(A) and 3.1(a)(4)(B) provided that no new harvests occur in the previously cut harvest unit or would-be buffer area until the harvest unit cut prior to project commencement meets the requirements of subchapter 3.1(a)(4)(A) and 3.1(a)(4)(B);*

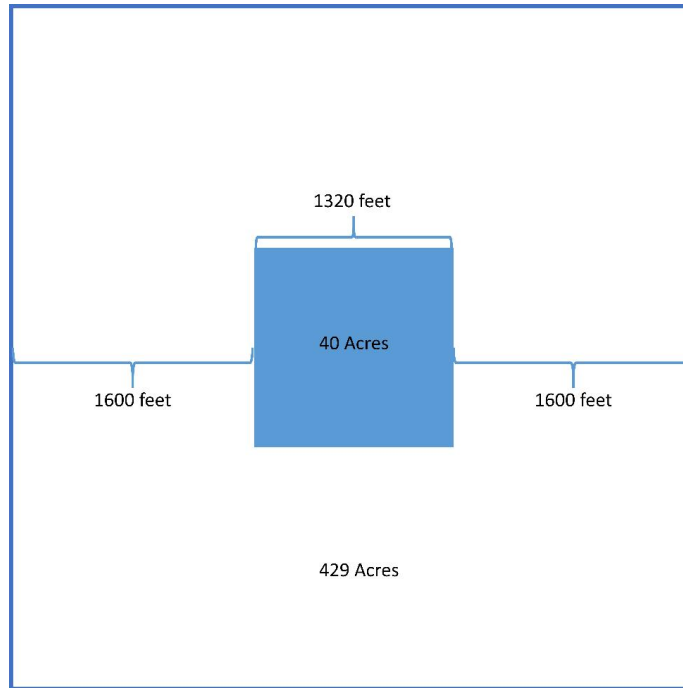
The proposed language is potentially problematic in that it would require one even aged management buffer approach to be applied in all forest types, situations, topographies, and ownership types across the US in order to protect visual impacts and maintain wildlife habitat values. We believe the management of forests across the country using one approach will not be effective to meet the intent of the proposed protocol change without significant negative impacts. The US has a wide variety of forests for which this proposed language is not a “one size fits all” solution.

It is our position that the implementation of the proposed requirement has a host of potentially negative unintended consequences including:

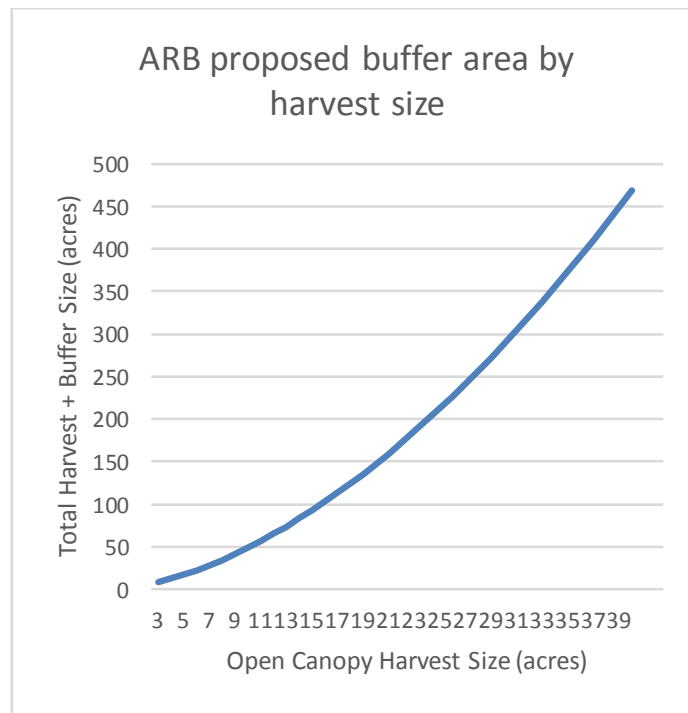
1. If a forest owner were to conduct a 40 acre open canopy harvest under the proposed language, the buffer policy (1600 linear feet around the harvest) would take 429 acres (see Figure 1) out of the harvest plans for similar even aged harvests for extended periods of time on a project area. For example, in the Allegheny region of Pennsylvania where natural regeneration techniques are used, regeneration harvests may not reach the minimum target stocking level for 20 years or more. Private landowners cannot bear the economic impact of the proposed level of harvest restriction over their ownership tenure. Nor is the proposed buffer policy in alignment with Forest Stewardship Council and other certification

requirements which were developed over years by diverse stakeholder groups for use throughout the United States.

**Figure 1 – Buffer Requirement for a 40-acre Open Canopy Harvest**



**Figure 2 – Buffer Size by Harvest Unit Size**



2. The minimum retention of 50 square feet of basal area in the area surrounding a 40 acre cut could translate into unsustainable management for the forest surrounding the target harvest block. Every forest has a mix of species with unique silvicultural requirements, which if not met through management, can be negatively impacted for years into the future. Forcing all landowners to follow one prescriptive approach regardless of their forests' unique requirements can translate to mismanagement at worst, and undesired changes in species composition at the least. The policy needs to recognize and provide latitude for the appropriate treatment of each landowner's forest.
3. The proposed harvest restrictions do not recognize the geographic and topographic differences amongst regions of the country. For example, while the new policy would undoubtedly mitigate visual impacts of harvests in steep mountainous terrain, it would have little to no perceptible positive impact on that forest value where the topography is gently sloping to flat. This translates to a visual management restriction that limits a forest owner's management operations with no perceptible benefit to the ARB program.
4. Wildlife habitat requirements for early successional habitat vary widely across the country. Species such as the Canada Lynx require larger early successional habitats than 40 acres, ruffed grouse management in the lakes States require overstory retention levels below 50 square feet of basal area, many small mammals in the eastern US require larger than 40 acre home ranges in early successional habitat, and many Neotropical birds also require larger young forests. These are just some examples of how one country-wide set of criteria will not meet all intended objectives of this portion of the ARB program.
5. The proposed regulation could reduce the tools available to forest owners to practice sustainable forestry. For instance, in areas where ungulate (deer and elk) populations are high, small cuts isolated in the landscape can, and often do, fail to regenerate due to browse pressure. Regeneration failures are expensive and can create compliance and conformance issues with current forestry regulations in many programs across the country including ARB's proposed buffer and green-up requirements. Landowners faced with these challenges often create aggregates of small cuts in a geography to overwhelm localized ungulate populations, allowing the regeneration to thrive. The proposed regulation would preclude the use of this valuable solution to a prevalent problem with forest sustainability.

We would like to point out that the current ARB regulation already contains strong safeguards that provide significant protection of wildlife, aesthetic, and other forest values. These current protocol components allow for participation by forest owners in a manner that is regionally specific, scientifically based, and suited to the forests on the subject tract. For example, under the Natural Forest Management Criteria the protocol gives forest owners the option of choosing to participate in a third party forest certification program under the **Sustainable Forestry Initiative, Forest Stewardship Council, and American Tree Farm programs**. These programs already have detailed criteria and procedures for various regions of the Country to protect forest values for aesthetics and wildlife habitat. In addition, many forest owners also operate under requirements of State Forest Practices Acts, state silvicultural BMPs for soil and water quality, local forestry regulations, Federal

(Bureau of Indian Affairs) approved management programs/plans, and/or voluntary managed forest tax laws that also protect the target forest values with detailed core requirements.

We suggest that ARB waive the proposed buffer regulation for forest owners participating under an approved forest certification program, state FPA, federally approved management plan, or managed forest tax program. Forest owners who choose not to participate in any of these programs could then be required to meet a core criteria in the regulation that also meets the intent of the regulation change. By taking this approach, the compliance protocol enforces management considerations for aesthetics and wildlife program-wide while recognizing that meeting this requirement needs to be appropriate for each project location and forest type. We feel this approach would maintain each project owner's ability to manage for aesthetic impacts and wildlife habitat in a manner that makes sense for their forest and region while meeting the high standard set by the program.

We propose that the proposed language in section 3.1(4) of the draft protocol be changed to the following:

**(4) If harvesting occurs within the project area, meet the following harvest unit size and buffer area requirements:**

**(A) Open Canopy Harvest Units must not exceed 40 acres in total area;**

**(B) Open Canopy Harvest Units must have a buffer area of forest vegetation that meets one of the following criteria:**

**a) Landowners participating in programs such as State or local forest practices regulations, voluntary forest certification programs such as FSC, SFI, or ATFS, Federally approved forest management plans, State managed forest tax laws, or local forestry regulations must meet or exceed the specified visual management strategies and buffer widths for their project area or;**

**b) Buffers surrounding the Open Canopy Harvest Unit must not contain any forest which qualifies as an Open Canopy Harvest. The width of the buffer area must be a minimum of twice the size of the harvest unit, or 300 linear feet, whichever is less.**

**c) Due to the unique historical management of landholdings and current oversight by the Bureau of Indian Affairs, Tribal forestland held in trust is exempt from Open Canopy Harvest Unit and buffer requirements.**

(C) Cuts on harvest units that occurred prior to the project commencement date are exempt from subchapters 3.1(a)(4) (A) and 3.1(a)(4)(B) provided that no new harvests occur in the previously cut harvest unit or would-be buffer area until the harvest unit cut prior to project commencement meets the requirements of subchapter 3.1(a)(4)(A) and 3.1(a)(4)(B);

## Determination for Timing and Duration of Initial Crediting Period

Section 95981(e) of the Regulation states:

*(e) Determination for Timing and Duration of Initial Crediting Periods for Offset Projects Submitted Through ARB. The initial crediting period will begin with the date that the first verified GHG emission reductions and GHG removal enhancements occur, according to the first Positive Offset or Qualified Positive Offset Verification Statement that is received by ARB, **unless otherwise specified in a Compliance Offset Protocol**. An early action offset project that transitions pursuant to section 95990(k) will begin its initial crediting period pursuant to section 95990(k)(2).*

For IFM projects which are above common practice, a minimum initial crediting period is not required since the benefit of the action is not measured over time, but is instead a singular event. The requirement for a minimum 6-month crediting period results in unnecessary delays in the commencement and issuance of IFM projects which are above common practice.

**We recommend that language is inserted into the Forest Compliance Protocol which would allow IFM projects above common practice not be required to have a minimum initial crediting period as is currently the case with Ozone Depleting Substances projects.**

## Division of Offset Projects

In addition to these comments specific to the proposed protocol changes, we also recommend ARB explore the ability for a registered IFM project to be geographically subdivided. Since all carbon accounting is spatially explicit this is possible without compromising the integrity of the GHG emission reductions or enhancements. We feel the ability to split existing projects will increase participation of landowners in the program because it provides transaction flexibility in future title conveyances of the project area.